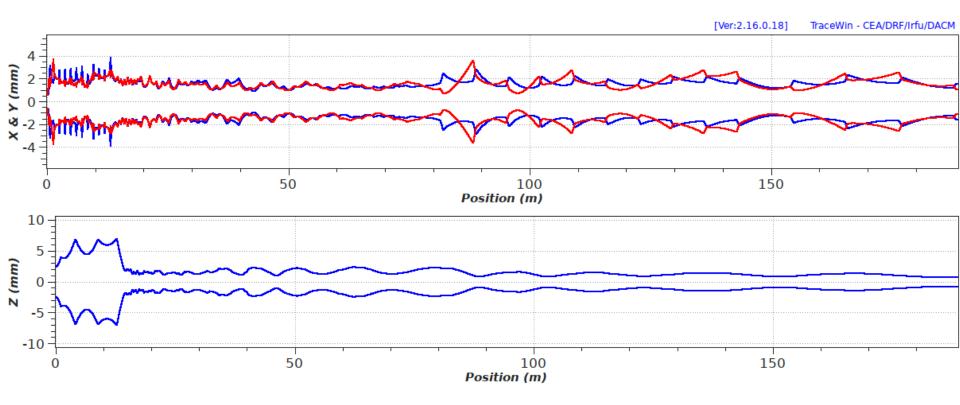


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SSR2 Cavity Fault Linac Lattice Retuning

JF Ostiguy Accelerator Physics Meeting 07/02/2019

Perturbed Envelope

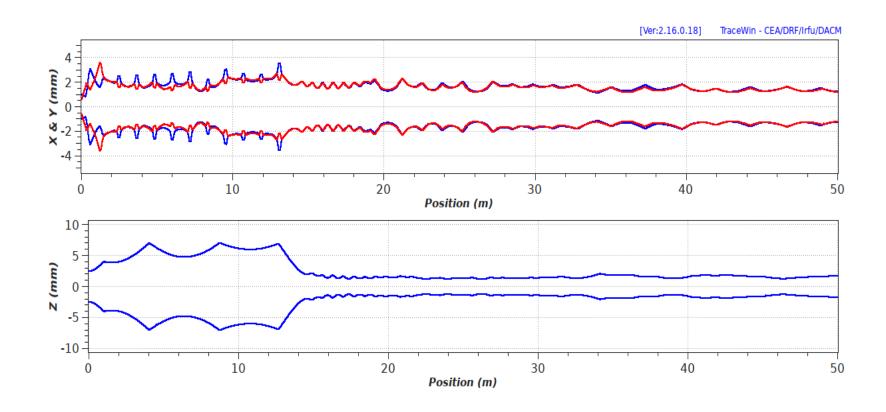




Retuning Strategy

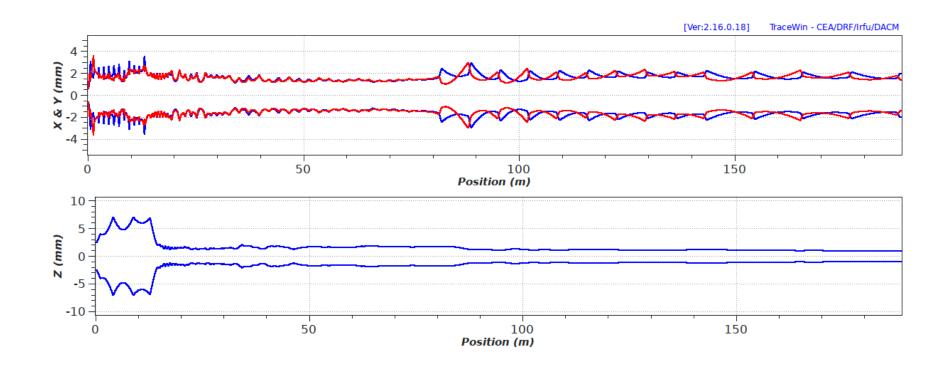
- SSR2 period focussing element pattern is S-CC; losing the first cavity has minimal effect on transverse dynamics
- Adjust Field and Phase in the last two cavities of the upstream SSR1 module and in cavities 2,3 of SSR2 to match unperturbed longitudinal lattice functions at the downstream end of SSR2 period 2.

Retuned Lattice Envelope Detail (SSR1-SSR2 Interface) Partran Mode



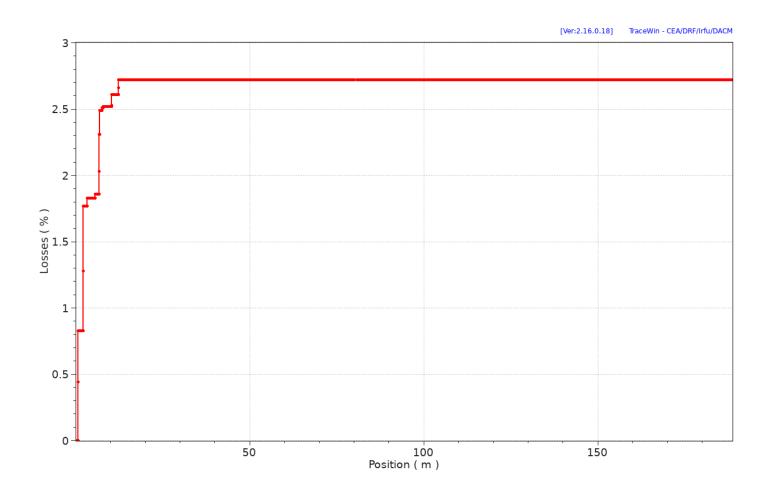


Retuned Lattice – Full Linac (Partran Mode)



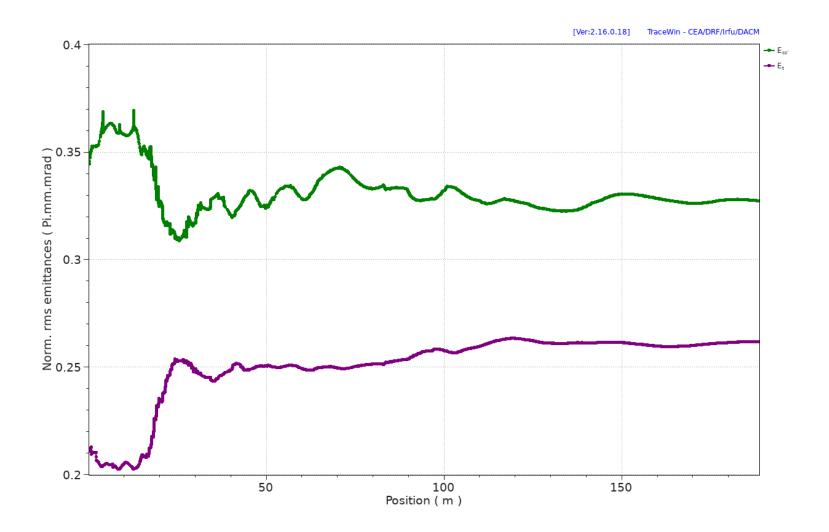


Losses





Emittances





Energy

